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Frank C. Eisenschenk, Ph.D., Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner

Helen Nguyen

Art Unit

1615

Applicants

Michael B. Zemel, Hang Shi, Paula C. Zemel

Serial No.

09/654,357

Filed

September 1, 2000

For

Materials and Methods for the Treatment or Prevention of Obesity

DECLARATION UNDER 37 C.F.R. § 1.131

Examining Group 1617

Patent Application

Docket No. UTR-104

Serial No. 09/654,357

Commissioner of Patents and Trademarks Washington, D.C. 20231

DECLARATION UNDER 37 C.F.R. § 1.131

Sir:

DR. MICHAEL B. ZEMEL, DR. HANG SHI, AND DR. PAULA C. ZEMEL DECLARE:

- THAT we are co-inventors of the invention disclosed and claimed in U.S. 1. Application Serial No. 09/654,357.
- THAT said invention was completed in the United States prior to January 2000, as 2. shown by the following exhibits. We conceived and reduced to practice methods for the stimulation of lipolysis in animals by increasing the amounts of dietary calcium consumed by these animals. Dietary calcium is provided in the form of calcium carbonate or powdered non-fat milk. Exhibit 1 shows that increasing dietary calcium stimulates lipolysis. The effects of a high calcium diet on adipocyte lipolysis was assayed using a glycerol release assay as described in Example 2 of the above-identified patent application.

3. That Exhibit 1 is a copy of pages taken from a laboratory record created and maintained in the normal course of laboratory operations, prior to January 2000. The completion date of the experiments and analyses recorded in these laboratory notebook pages have been redacted. We hereby attest that these redacted dates are prior to the critical date.

We hereby further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

,	Further, Declarants sayeth not.	
Ву:	Michael B. Zemel, Ph.D.	Date:
Ву:	Hang Shi, Ph.D.	Date:
Ву:	Paula C. Zemel Ph.D.	Date: 3-21-200/

1 D	i	mo1/1			
STD 1		0.000 0.000			•
MEAN Site 2 Site 2		3	ს.009	RGD=	0.488
MUAN	47.47 3.060	SD=	0.009	RSD=	0.072
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MEAN#		2D=	ປ.ບໍ່ມີ2	RSD=	0.024
PHE	or PANG	LYCEROL			
10	!	mo 1711			
:: fb 1	2,003	0.000			
1 1 2	2,000 2,988	SD= 0.950	0.00%	RSD=	0.350
. (U :	2,994 8,394	0.100	0.009	RSD=	0.300
	8,417 3,405 10,77	SD- 0.250	0.016	RUD =	u. 19a
MLAX= SID 5	15, 30	SD: 0.500	5.014	RSD-	6.130
MEAN= CTD 6	15.36 15.36 15.44	SD= 1.000	მ. ::30	RSD -	მ. საზ
	4.773	3D- 0.074	n. 009	RSD÷	0.088
Jan 12	0.074 1.096	0.036	0.000	PSD:	0.000
17 MEAN 2	0.085	u. 65 \$0≖ 0.143	0.000	RSD=	0,000
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29 MEAN=	-0.015 3.473	0.002	0.001	RSD=-	6.667
MEAN=	0.002; 5.089		0.000	RSD=	0.000
المرازة المحسيمينات	0.091 4.540	0.061	ີດ. ດດດ	RSD=	,
7	A 530	U UU!	-	****	A

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                                     RSD=-122.2
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 be MEAN=
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                                    RSD - 0. 66n
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            5.000 0.090
       44
 Ü.090
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                                   RSD= 0.000
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フら MEAN=
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                                   RSD = 0.000
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Sa MEAN=
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                                   RSD= 0.000
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       48
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 9 almean=
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                                  RSD = 0.000
O AMEAN=
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       51
           4.046 0.034
IUB MEAN=
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                           0.000
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           4.792 0.075
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           5.044 0.089
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                                   RSD = 0.000
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            4.033 0.033
       51
            4.046 0.034
   MEAN=
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                      Sb≟
                           0.000
                                   RSD= 0.000
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           4.307 0.076
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           4.792 0.075
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           5.049 0.089
       53
           5.044 0.089
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           5.674 0.124
   MEAN=
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13 hMEAN=
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                                  RSD= 0.000
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63
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                                 RSD= 0.000
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                                 RSD= 0.000
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                                 RSD= 6.603
   金70 £ 2.213-0.067L
          209-0.067L
                   SD=
                         0.000
                                 RSD= 0.000
                                 RSD= 0.781
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<i>'</i> .								
•	8	0.221	0.1988	1.11167		• (
	U	0.221	0.1300	0.947136				
ACTH	l(100nM)	1		0.547 130				
con	i(TOOL IIVI)	,						
1a		0.038	0.3977	0.095549				
1b		0.057	0.3636					
2a		0.057	0.4902					
2b		0.000	0.4441	0.110515				
3b		0.056	0.3771	0.148502				
4a		0.035	0.5005					
4b		0.006	0.5643	0.06993	0.010633			
		0.000	0.5643	0.447940	0.010633			
avg	```			0.117813				
. high-(Ja	0.017	0.4475		0.027000			
5a			0.4475	0.536030	0.037989			
5b		0.177 0.21	0.3302					
· 6а			0.4576	0.458916				
6b		0.075	0.4078	0.183914				
7a		0.174	0.3832	0.454071				
7b		0.098	0.5349	0.183212				
8a		0.115	0.4088	0.281311				
8b		0.154	0.2215	0.69526				
avg				0.39896				
	m-dairy	0.400	0.5004	0.040074				
9a		0.166	0.5304	0.312971				
9b		0.107	0.4747	0.225406				
10a		0.169	0.53					
10b		0.103	0.5327	0.193355				
11a		0.155	0.3235	0.479134				
11b		0.172	0.3931	0.437548				
12a		0.216	0.2288	0.944056				
12b		0.226	0.2761	0.818544				
avg				0.466235				
high-d	airy	0.007	0.0045					
13a		0.207		0.524715				
13b		0.069		0.172543				
14a		0.253		0.824104				
14b		0.237	0.2847	0.832455				
15a		0.196	0.2033	0.964092				*
15b		0.198	0.3495	0.566524	0.054545			
16a		0.023	0.4219	0.400500	0.054515			
16b avg		0.18	u.4152	0.433526 0.616851				